

## I. AMENDMENT

### **In the Claims:**

Please amend claims 9-21, 23-35, 52, 54, and 56-84. Please add new claims 85-86. Please cancel claims 8, 22, and 53.

1-8. (Cancelled)

9. (Currently Amended) The ~~aerial dispersion system~~ method of claim & 20, wherein said aerial dispersant holding tanks are configured with a shape and outer dimensions that correspond to dimensions of a cargo container employed in the side-loading cargo system of said host aircraft.

10. (Currently Amended) The ~~aerial dispersion system~~ method of claim & 20, wherein said aerial dispersant holding tanks are configured with a shape and dimensions for installation in a passenger compartment of said host aircraft through a passenger door opening of said fixed wing host aircraft.

11. (Currently Amended) The ~~aerial dispersion system~~ method of claim & 20, wherein each of said aerial dispersant holding tanks comprises at least one flow opening on a first end of said holding tank, said first flow opening being configured to sealably mate with a flow opening of an adjacent aerial dispersant holding tank when two or more of said aerial dispersant tanks are positioned in adjacent end-to-end relationship within the baggage or cargo hold of said host aircraft.

12. (Currently Amended) The ~~aerial dispersion system~~ method of claim & 20, wherein a first one of said aerial dispersant holding tanks is configured to be coupled to at least a

second one of said aerial dispersant holding tanks to provide a dispersant material flow path from said first aerial dispersant holding tank to said second aerial dispersant holding tank when said first and second aerial dispersant tanks are positioned in adjacent front end-to-rear end relationship within the baggage or cargo hold of said host aircraft.

13. (Currently Amended) The ~~aerial dispersion system~~ method of claim & 20, wherein said dispersal regulator comprises at least a part of a dispersal equipment container or a dispersal equipment pallet.

14. (Currently Amended) The ~~aerial dispersion system~~ method of claim & 20, wherein said dispersal regulator comprises a pump.

15. (Currently Amended) The ~~aerial dispersion system~~ method of claim 12, wherein at least one of said first or second aerial dispersant tanks comprises flow control equipment configured to control flow of materials from said first aerial dispersant holding tank to said second aerial dispersant holding tank.

16. (Currently Amended) The ~~aerial dispersion system~~ method of claim & 20, further comprising a cargo door configured to be removably disposed within a cargo opening of said host aircraft; and wherein said airborne dispersal device is configured to be coupled to said dispersal regulator through said cargo door.

17. (Currently Amended) The ~~aerial dispersion system~~ method of claim & 20, wherein said aerial dispersion system further comprises ~~comprising~~ a passenger door configured to be removably disposed within a passenger door opening of said host aircraft; and

wherein said airborne dispersal device is configured to be coupled to said dispersal regulator through said passenger door.

18. (Currently Amended) The ~~aerial dispersion system~~ method of claim 8 20, wherein said two or more aerial dispersant holding tanks comprise a material containment subsystem; wherein said dispersal regulator comprises a material dispersal subsystem; and wherein said aerial dispersion system further comprises a control subsystem configured to be coupled to said material containment subsystem and said material dispersal subsystem.

19. (Currently Amended) The ~~aerial dispersion system~~ method of claim 18, wherein said aerial dispersion system further comprises ~~comprising~~ a navigation subsystem, a communications subsystem, and a sensor subsystem; wherein said navigation subsystem, communications subsystem, and sensor subsystem are configured to be coupled to said control subsystem; and wherein said control subsystem, said navigation subsystem and said communications subsystem are configured to be coupled to one or more Host Aircraft Systems.

20. (Currently Amended) A method of temporarily converting a at least one fixed wing host aircraft for aerial dispersion purposes, comprising:

~~removably~~ installing ~~the~~ an aerial dispersion system ~~of claim 8~~ on a said fixed wing host ~~fixed-wing~~ aircraft to form an aircraft-based material dispersion system; and

then removing said aerial dispersion system from said fixed wing host aircraft;

wherein said aerial dispersion system comprises:

two or more modular aerial dispersant holding tanks configured to be sequentially loaded into said host aircraft and coupled together within said host aircraft to provide a dispersant material flow path,

a dispersal regulator configured to be coupled to said two or more aerial dispersant holding tanks, and

an airborne dispersal device configured to be coupled to said dispersal regulator; and

wherein said aerial dispersant holding tanks are configured with a shape and outer dimensions that correspond to dimensions of a cargo container employed in a side-loading cargo system of said fixed wing host aircraft, or wherein said two or more modular aerial dispersant holding tanks are configured for installation and removal from an aircraft passenger compartment of said fixed wing host aircraft through a passenger door opening of said fixed wing host aircraft.

21. (Currently Amended) An aerial dispersion method, comprising ~~removably installing the aerial dispersion system of claim 8 on a host fixed wing aircraft to form an aircraft-based material dispersion system;~~ and aerially dispersing a material from said aircraft-based material dispersion system of claim 20 after installing said aerial dispersion system on said host fixed wing aircraft and prior to removing said aerial dispersion system from said fixed wing host aircraft.

22. (Cancelled)

23. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim ~~33~~ 22, wherein said two or more aerial dispersant holding tanks are configured to be removably disposed within said baggage or cargo hold of said host aircraft using said side-loading cargo system of said host aircraft.

24. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim ~~33~~ 22, wherein said two or more aerial dispersant holding tanks are configured to be removably disposed within a passenger compartment of said host aircraft through said passenger door opening.

25. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 23, wherein said at least one aircraft-based material dispersion system comprises two or more of said aerial dispersant holding tanks coupled together and removably disposed in adjacent front end-to-rear end relationship within said baggage or cargo hold of said host aircraft.

26. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 24, wherein said at least one aircraft-based material dispersion system comprises two or more of said aerial dispersant holding tanks coupled together and removably disposed in adjacent front end-to-rear end relationship within said passenger compartment of said host aircraft.

27. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 25, wherein said at least one aircraft-based material dispersion system further comprises ~~comprising~~ flow control equipment coupled to at least one of said aerial dispersant holding tanks and configured to control flow of materials between two or more of said aerial dispersant holding tanks.

28. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 25, wherein said at least one aircraft-based material dispersion system further comprises ~~comprising~~ a cargo door removably disposed within a cargo opening of said host aircraft; and wherein said airborne dispersal device is coupled to said dispersal regulator through said cargo door.

29. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 26, wherein said at least one aircraft-based material dispersion system further comprises ~~comprising~~ a passenger door removably disposed within a passenger door opening of said host aircraft; and wherein said airborne dispersal device is coupled to said dispersal regulator through said passenger door.

30. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 23, wherein said dispersal regulator and said airborne dispersal device are removably installed on said host aircraft.

31. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim ~~33~~ 22, wherein said two or more aerial dispersant holding tanks comprise a material containment subsystem; wherein said dispersal regulator comprises a material dispersal subsystem; and wherein said aerial dispersion system further comprises a control subsystem coupled to said material containment subsystem and said material dispersal subsystem.

32. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 31, wherein said at least one aircraft-based material dispersion system further comprises

~~comprising~~ a navigation subsystem, a communications subsystem, and a sensor subsystem; wherein said navigation subsystem, communications subsystem, and sensor subsystem are coupled to said control subsystem; and wherein said control subsystem, said navigation subsystem and said communications subsystem are coupled to one or more Host Aircraft Systems.

33. (Currently Amended) An aerial dispersion method, comprising aerially dispersing one or more materials from ~~the~~ at least one aircraft-based material dispersion system, said at least one aircraft-based material dispersion system comprising: of claim 22

a fixed wing host aircraft;

two or more modular aerial dispersant holding tanks sequentially disposed within said fixed wing host aircraft, said two or more modular aerial dispersant holding tanks being coupled together within said fixed wing host aircraft to provide a dispersant material flowpath;

a dispersal regulator disposed on said host aircraft and coupled to said two or more aerial dispersant holding tanks; and

an airborne dispersal device disposed on said host aircraft and coupled to said dispersal regulator;

wherein said two or more aerial dispersant holding tanks are disposed within a baggage or cargo hold of said fixed wing host aircraft and are configured to be compatible with a side-loading aircraft cargo system of said fixed wing host aircraft, or wherein said two or more aerial dispersant holding tanks are disposed within a passenger compartment of said fixed wing host aircraft and are configured for installation and removal from an aircraft passenger compartment of said fixed wing

host aircraft through a passenger door opening of said fixed wing host aircraft; and

wherein said method further comprises installing said two or more modular aerial dispersant holding tanks, said dispersal regulator and said airborne dispersal device on said fixed wing host aircraft prior to aerially dispersing said one or more materials from said at least one aircraft-based material dispersion system; and

wherein said method further comprises removing said two or more modular aerial dispersant holding tanks, said dispersal regulator and said airborne dispersal device from said fixed wing host aircraft after aerially dispersing said one or more materials from said at least one aircraft-based material dispersion system.

34. (Currently Amended) ~~A~~ The aerial dispersion method of claim 33, comprising aerially dispersing one or more materials in a coordinated manner from a fleet of aircraft-based material dispersion systems of claim 33 22- ; and wherein said method further comprises installing said two or more modular aerial dispersant holding tanks, said dispersal regulator and said airborne dispersal device on each aircraft of said fleet of said fixed wing host aircraft prior to aerially dispersing said one or more materials from said fleet of aircraft-based material dispersion systems; and wherein said method further comprises removing said two or more modular aerial dispersant holding tanks, said dispersal regulator and said airborne dispersal device from each aircraft of said fleet of fixed wing host aircraft after aerially dispersing said one or more materials from said fleet of aircraft-based material dispersion systems.

35. (Currently Amended) ~~The aircraft-based material dispersion system~~ method of claim 33 22, wherein said host aircraft comprises a wide body aircraft.



36-51. (Cancelled)

52. (Currently Amended) The ~~aerial dispersion system~~ method of claim & 20, wherein said host aircraft comprises a wide body aircraft.

53. (Cancelled)

54. (Currently Amended) The ~~aerial dispersion~~ method of claim 20, wherein said host aircraft comprises a commercial passenger or commercial cargo plane.

55. (Previously Presented) The aerial dispersion method of claim 21, further comprising installing at least first and second aerial dispersant holding tanks into a baggage or cargo hold of said host fixed wing aircraft by slidably or rollably transporting said first and second aerial dispersant holding tanks within said baggage or cargo hold in a forward or rearward direction parallel to the longitudinal axis of the aircraft fuselage; and stacking said first and second aerial dispersant holding tanks in adjacent front end-to-rear end relationship within said baggage or cargo hold of said host aircraft.

56. (Currently Amended) The aerial dispersion method of claim 21, wherein said method comprises aurally dispersing said material from said aircraft-based material dispersion system to suppress a fire prior to removing said aerial dispersion system from said fixed wing host aircraft.

57. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim ~~33~~ 22, wherein said host aircraft comprises a commercial passenger or commercial cargo plane.

58. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 23, wherein said two or more aerial dispersant holding tanks are configured with a shape and outer dimensions that correspond to dimensions of a cargo container employed in said side-loading cargo system of said host aircraft.

59. (Currently Amended) The aerial dispersion method of claim 33, wherein said method comprises aurally dispersing said one or more materials from said aircraft-based material dispersion system to suppress a fire prior to removing said two or more modular aerial dispersant holding tanks, said dispersal regulator and said airborne dispersal device from said fixed wing host aircraft.

60. (Currently Amended) The aerial dispersion method of claim 34, wherein said method comprises aurally dispersing said one or more materials from said fleet of aircraft-based material dispersion systems to suppress a fire prior to removing said two or more modular aerial dispersant holding tanks, said dispersal regulator and said airborne dispersal device from each aircraft of said fleet of fixed wing host aircraft.

61. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 58, wherein said two or more aerial dispersant holding tanks are disposed and stacked in end to end manner within said baggage or cargo hold of said host aircraft in a direction parallel to the longitudinal axis of the fuselage of said aircraft.

62. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 61, wherein said two or more aerial dispersant holding tanks are disposed within said baggage or cargo hold of said host aircraft upon a surface configured to allow said cargo containers to be slidably or rollably transported forward or rearward in a direction parallel to the longitudinal axis of said aircraft fuselage.

63. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 52, wherein said host aircraft has a gross carrying capacity of greater than or equal to about 100,000 pounds.

64. (Currently Amended) A method of temporarily converting at least one wide body host aircraft for aerial dispersion purposes ~~An aircraft-based material dispersion system,~~ comprising:

~~a wide body host aircraft;~~

installing one two or more aerial dispersant holding tanks disposed within said wide body host aircraft to form an aircraft-based material dispersion system; and

then removing said one or more aerial dispersant holding tanks from said wide body host aircraft , said aerial dispersant holding tanks being configured as cargo containers;

~~a dispersal regulator disposed on said wide body host aircraft and coupled to said two or more aerial dispersant holding tanks; and~~

~~an airborne dispersal device disposed on said wide body host aircraft and coupled to said dispersal regulator.~~

65. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 64, wherein said wide body host aircraft has a gross carrying capacity of greater than or equal to about 100,000 pounds.

66. (Currently Amended) The ~~aerial dispersion~~ method of claim 65, wherein said wide body host aircraft comprises a wide body passenger or wide body cargo plane.

67. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 64, wherein said wide body host aircraft has a side-loading cargo system; and wherein said one ~~two~~ or more aerial dispersant holding tanks are configured as cargo containers that are removably disposed within a baggage or cargo hold of said host aircraft using said side-loading cargo system of said host aircraft.

68. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 64, wherein said wide body host aircraft has at least one passenger door opening for access to a passenger compartment of said aircraft; and wherein said one ~~two~~ or more aerial dispersant holding tanks are configured as cargo containers that are removably disposed within a passenger compartment of said wide body host aircraft through said passenger door opening.

69. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 67, wherein said aircraft-based material dispersion system comprises two or more of said aerial dispersant holding tanks coupled together and removably disposed in adjacent front end-to-rear end relationship within said baggage or cargo hold of said wide body host aircraft.

70. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 68, wherein said aircraft-based material dispersion system comprises two or more of said aerial dispersant holding tanks coupled together and removably disposed in adjacent front end-to-rear end relationship within said passenger compartment of said wide body host aircraft.

71. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 69, wherein said aircraft-based material dispersion system further ~~comprising~~ comprises flow control equipment coupled to at least one of said aerial dispersant holding tanks and configured to control flow of materials between two or more of said aerial dispersant holding tanks.

72. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 69, wherein said aircraft-based material dispersion system further ~~comprising~~ comprises a cargo door removably disposed within a cargo opening of said wide body host aircraft; and wherein said airborne dispersal device is coupled to said dispersal regulator through said cargo door.

73. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 70, wherein said aircraft-based material dispersion system further ~~comprising~~ comprises a passenger door removably disposed within a passenger door opening of said wide body host aircraft; and wherein said airborne dispersal device is coupled to said dispersal regulator through said passenger ~~cargo~~ door.

74. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 67, wherein said dispersal regulator and said airborne dispersal device are removably installed on said wide body host aircraft.

75. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 64, wherein said one ~~two~~ or more aerial dispersant holding tanks comprise a material containment subsystem; wherein said dispersal regulator comprises a material dispersal subsystem; and wherein said ~~aerial dispersion~~ aircraft-based material dispersion system further comprises a control subsystem coupled to said material containment subsystem and said material dispersal subsystem.

76. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 75, wherein said aircraft-based material dispersion system further comprising comprises a navigation subsystem, a communications subsystem, and a sensor subsystem; wherein said navigation subsystem, communications subsystem, and sensor subsystem are coupled to said control subsystem; and wherein said control subsystem, said navigation subsystem and said communications subsystem are coupled to one or more Host Aircraft Systems.

77. (Currently Amended) ~~An aerial dispersion~~ The method of claim 64, wherein said wide body host aircraft has a conventional passenger or conventional cargo configuration prior to installing said one or more aerial dispersant holding tanks within said wide body host aircraft; and wherein said method further comprising comprises:

aerially dispersing one or more materials from ~~the~~ said aircraft-based material dispersion system ~~of claim 64; and~~

then removing said one or more aerial dispersant holding tanks from within said wide body host aircraft to return said host wide body aircraft to said conventional passenger or conventional cargo configuration.

78. (Currently Amended) The ~~aerial dispersion~~ method of claim 77, wherein said method comprises aerially dispersing said one or more materials from said aircraft-based material dispersion system to suppress a fire prior to removing said one or more aerial dispersant holding tanks from within said wide body host aircraft.

79. (Currently Amended) ~~An aerial dispersion~~ The method of claim 64, wherein said method comprises:

converting two or more host wide body aircraft to a fleet of aircraft-based material dispersion systems by installing one or more aerial dispersant holding tanks within each of said two or more wide body host aircraft to form a fleet of aircraft-based material dispersion systems, each of said two or more host wide body aircraft having a conventional passenger or conventional cargo configuration prior to installing said one or more aerial dispersant holding tanks within each of said wide body host aircraft;

~~comprising~~ aerially dispersing one or more materials in a coordinated manner from a said fleet of aircraft-based material dispersion systems of claim 64 ; and

then removing said one or more aerial dispersant holding tanks from within each of said two or more wide body host aircraft to return said two or more host wide body aircraft to said conventional passenger or conventional cargo configuration.

80. (Currently Amended) The ~~aerial dispersion~~ method of claim 79, wherein said method comprises aerially dispersing said one or more materials from said fleet of aircraft-based

material dispersion systems to suppress a fire prior to removing said one or more aerial dispersant holding tanks from within each of said two or more wide body host aircraft.

81. (Currently Amended) The ~~aerial-based material dispersion system~~ method of claim 64, wherein said host aircraft comprises a commercial passenger or commercial cargo plane.

82. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 67, wherein said two or more aerial dispersant holding tanks are configured with a shape and outer dimensions that correspond to dimensions of a cargo container employed in said side-loading cargo system of said host aircraft.

83. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 82, wherein said two or more aerial dispersant holding tanks are disposed and stacked in end to end manner within said baggage or cargo hold of said host aircraft in a direction parallel to the longitudinal axis of the fuselage of said aircraft.

84. (Currently Amended) The ~~aircraft-based material dispersion system~~ method of claim 83, wherein said two or more aerial dispersant holding tanks are disposed within said baggage or cargo hold of said host aircraft upon a surface configured to allow said cargo containers to be slidably or rollably transported forward or rearward in a direction parallel to the longitudinal axis of said aircraft fuselage.

85. (New) An aerial dispersion method, comprising:



installing an aerial dispersion system of claim 20 on aircraft of a fleet of said fixed wing host aircraft to form a fleet of aircraft-based material dispersion systems of claim 20;

then aerially dispersing one or more materials in a coordinated manner from said fleet of aircraft-based material dispersion systems of claim 20; and

then removing said aerial dispersion systems of claim 20 from each aircraft of said fleet of fixed wing host aircraft.

86. (New) The aerial dispersion method of claim 85, wherein said method comprises aerially dispersing said one or more materials from said fleet of aircraft-based material dispersion systems to suppress a fire prior to removing said aerial dispersion systems of claim 20 from each aircraft of said fleet of fixed wing host aircraft.